Developing and Testing a Taxonomy of Lateness Behavior

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Compared with other physical withdrawal behaviors such as employee turnover and absenteeism, employee lateness has been theoretically neglected. Three categories of lateness behavior (increasing chronic, stable periodic, and unavoidable) were defined on the basis of pattern, frequency, and duration of incidents. Hypothesized antecedents of each lateness category were tested using 2 samples, 353 hospital employees and 402 bank employees. Support was found for the idea that each category exhibits differential relationships to other work behaviors and specific antecedents. Additional empirical results showed that the "never late" subgroup from each sample was significantly different from the lateness subgroups on various antecedents and work behaviors. Results and limitations of the study are further discussed.

Employee lateness has long been recognized by organizations as a behavior necessitating monitoring and control (e.g., Motley, 1926). Company rules and regulations for employees almost always contain a section that communicates the organization's policies for handling employee lateness. The costs associated with employee lateness include the loss of late-employee productivity, the administration time of supervisors (e.g., counseling-disciplining late employees), and the negative impact on other workers who have to pick up the slack (Cascio, 1987). For many years, application-oriented articles have been written discussing how to prevent or reduce employee lateness (e.g., Kempen, 1982; Kennedy, 1984; Kite, 1984; Ruchti, 1967).

Despite the necessity of organizations to at least monitor employee lateness, there has been very little attempt to develop a systematic approach for studying employee lateness. This lack of conceptual work on employee lateness stands in stark contrast to the large body of literature devoted to conceptual models on the related physical withdrawal behaviors (Blau & Boal, 1987; Rosse & Hulin, 1985) of absenteeism (e.g., Brooke, 1986; Gibson, 1966; Steers & Rhodes, 1978) and turnover (e.g., March & Simon, 1958; Mobley, 1977; Mobley, Griffeth, Hand, & Meglino, 1979; Steers & Mowday, 1981). The purpose of this article is to develop and test a taxonomy of lateness behavior. It will be argued that different categories of lateness behavior exist and can be differentiated on the basis of (a) the pattern, frequency, and duration of lateness incidents; (b) the relationships of lateness-behavior categories to other physical withdrawal behaviors; and (c) different antecedents for the lateness-behavior categories.

Unmasking different categories of lateness behavior will improve the ability to describe and understand the construct of lateness. Increased explanation of lateness behavior may help organizations to more effectively control such behavior. Empirical work has already been done to develop taxonomies of other physical withdrawal behaviors, including turnover behavior (Abelson, 1987; Campion, 1991) and absenteeism (Dalton & Mesch, 1991). It is my position that further research is needed to understand lateness, before combining lateness with other withdrawal behaviors, such as absence, into a more general work withdrawal construct (Hanisch & Hulin, 1990, 1991). Such a general work withdrawal construct will undoubtedly be useful. However, our current lack of knowledge regarding categories or types within each withdrawal behavior would seem to require first fully understanding the construct validity of each behavior (Schwab, 1980) before aggregating those behaviors into a more general construct.

Table 1 describes the proposed taxonomy of lateness behavior to be tested. It is assumed that a more accurate meaning of lateness can be objectively determined by examining the pattern, frequency, and duration of employee-lateness incidents, as opposed to employee- or supervisor-cited reasons. Borrowed from attribution theory (Jones & Nisbett, 1972), the causes for employee lateness assigned by the supervisor would tend to be employee controlled (i.e., avoidable), whereas attributions of the same behavior made by the employee would tend to be circumstance controlled (i.e., unavoidable). Empirical support for employees attributing absence behavior frequency more to unavoidable factors (e.g., illness) than controllable factors (e.g., difficulties getting up or disagreements with boss) is provided by Payne and Nicholson (1987).

Within this lateness taxonomy, a nonrandom pattern means that the individual exhibits a fairly predictable display of lateness behavior. This display will generally be increasing or stable in frequency and duration. A random pattern is unpredictable, so frequency and duration cannot be classified. This taxonomy of lateness, including relationships to other behaviors and antecedents, is largely derived from the cumulative findings of prior research. It is important to note that, in general, most previous studies of lateness (e.g., Adler & Golan; 1981; Angle & Perry, 1981; Clegg, 1983; Farrell & Robb, 1980; Gupta & Jenkins, 1983; Macy & Mirvis, 1976; Nicholson & Goodge, 1976; Rosse & Hulin, 1985) focused on blue-collar types of jobs (e.g., telephone operators, bus transit personnel, manufacturing employees, printing-company employees, food processors, and hospi-

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 Table 1

 A Taxonomy of Lateness Behavior

Category	Pattern, frequency, and duration	Relationship to other behaviors	Antecedents of such lateness
Increasing chronic	Nonrandom, increasing, and increasing	Positive to voluntary absence, voluntary turnover, leaving work early	Low job satisfaction Low job involvement Low organizational commitment
Stable periodic	Nonrandom, stable, and stable	Independent of voluntary absence, voluntary turnover, leaving work early	Leisure–income Tradeoff Work–family conflict
Unavoidable	Random	Positive to nonwork lateness	Transportation Bad weather Personal illness or accident

tal employees). In lateness studies with more professional samples such as nurses (e.g., Blau, 1985b; Jamal, 1981), shift work was required. Thus, the proposed lateness taxonomy in Table 1 is most applicable to either blue-collar or shift-related jobs.

This lateness taxonomy is not intended to predict that employees in one type of lateness category will show more or less overall lateness (frequency and duration of incidents) than employees in another category. It is possible for employees falling in any of the categories to have more overall lateness than employees in the other two categories. Instead, categorizing individuals into types of lateness on the basis of pattern, frequency, and duration of incidents should improve understanding of the antecedents related to each category, as well as the relationships between lateness and other work behaviors. An explanation of each lateness behavior category is appropriate.

Increasing Chronic Lateness

As shown above, increasing chronic lateness is characterized by a nonrandom pattern of increasing frequency and duration. It is expected that this type of lateness will show a positive relationship to the physical withdrawal behaviors of voluntary absence, voluntary turnover, and leaving work early. This can be part of a progressive withdrawal model (Herzberg, Mausner, Peterson, & Capwell, 1957) or spillover model (Beehr & Gupta, 1978), for which there is some empirical support (e.g., Adler & Golan, 1981; Clegg, 1983; Rosse, 1988). Relevant antecedents to such lateness are the distinguishable work attitudes (Brooke, Russell, & Price, 1988; Mathieu & Farr, 1991) of job satisfaction, job involvement, and organization commitment. Although the empirical evidence is mixed, there is at least some support for these work attitudes being significantly negatively related to lateness (e.g., Angle & Perry, 1981; Beehr & Gupta, 1978; Blau, 1986; Clegg, 1983). However, even where significant work attitude-lateness relationships were found, the category of lateness being measured was not clearly defined. Mixing different categories of lateness behavior together will weaken relationships with the specific antecedents of each lateness category.

Stable Periodic Lateness

Stable periodic lateness is characterized by a nonrandom pattern of stable frequency and duration. This type of lateness is not expected to show a significant relationship to voluntary absence, turnover, or leaving early. It is not that employees exhibiting this type of lateness dislike their work situations (as they do for increasing chronic lateness), but they have "better or more important things to do." Leisure-income tradeoff and workfamily conflict should be positive antecedents to this type of lateness. Leisure-income tradeoff suggests that despite being docked for the time they are late, some employees may consciously choose to be a relatively fixed amount of time late on a regular basis because of their preference for some "leisurerelated" activity (e.g., reading the morning paper or sleeping). Leigh and Lust (1988) found a positive relationship between employee wages and lateness and suggested that the higher wage motivated the late worker to make a leisure-income tradeoff.

Work-family conflict is a form of interrole conflict in which the role pressures from work (e.g., on-time arrival) and family domains (e.g., dropping a child off at day care or school) are mutually incompatible (Greenhaus & Beutell, 1985). Despite the lack of previous research, work-family conflict is expected to be positively related to this type of lateness behavior (Schultz & Henderson, 1985). For example, parents—especially working mothers (Williams, Suls, Alliger, Learner, & Wan, 1991)—may place a higher priority on their children's needs. For such employees, following Lobel's (1991) utilitarian argument for career versus family role investment, the higher perceived level of family rewards over career rewards results in greater family versus career investment. This may be manifested by an employee systematically attending to a child's needs and sacrificing on-time arrival to work.

Unavoidable Lateness

Unavoidable lateness is characterized by a more random pattern of behavior. As noted earlier, frequency and duration can not be classified. To help distinguish this category of lateness from the other categories, it is expected that the randomness of this kind of lateness should show a positive relationship to the randomness of an employee's nonwork lateness behavior (e.g., being late to a social event). This is based on the assumption that such lateness transcends work and also includes nonwork situations. Employees who exhibit unavoidable lateness do so not in response to a bad work situation (increasing chronic) or because they have better or more important things to do (stable periodic) but because of less controllable factors such as transportation concerns, bad weather, personal illness, or accident. Such factors would be expected to lead to work (and nonwork) lateness. Gupta and Jenkins (1983) and Leigh and Lust (1988) found a significant positive relationship between employee-related transportation problems and lateness, whereas Farrell and Robb (1980) found a negative relationship between employeereported ease of travel to work and lateness. Motley (1926) found seasonal fluctuations in employee lateness, with the winter months showing the highest lateness rates. Jamal (1981) found a negative relationship between employee mental health and lateness.

On the basis of this literature review, the following hypotheses will be tested:

- H₁: Increasing chronic lateness, which is nonrandom, of increasing frequency and increasing duration, will show a stronger positive relationship to voluntary absenteeism, voluntary turnover, and leaving work early than stable periodic lateness, which is nonrandom, of stable frequency and duration.
- H₂: Unavoidable lateness, which is random, will be significantly positively related to nonwork lateness.
- H₃: Job satisfaction, organizational commitment, and job involvement will be significantly negatively related to increasing chronic lateness.
- H₄: Leisure-income tradeoff and work-family conflict will be significantly positively related to stable periodic lateness.
- H₅: Transportation concerns, bad weather, and personal illness or accidents will be significantly positively related to unavoidable lateness.

Method

Hospital Sample and Procedure

A questionnaire was constructed and administered in October 1990 on a voluntary basis to all nonexempt hospital employees for whom daily attendance records were kept. This hospital, located in a large Eastern city, offers patient care in many medical specialties. Sample respondents' jobs included secretary, clerk, receptionist, lab technician, maintenance worker, housekeeper, bill processor, and food service worker. Hospital management was concerned about employee lateness and supported the study. Union approval was also obtained. Subjects were given time at work to fill out the survey. The hospital's human resource department assisted with the survey administration across all departments and shifts. Complete confidentiality of subject responses was maintained and participants mailed their survey directly to the investigator in a preaddressed business reply envelope.

Of the 641 surveys distributed, 509 (79%) were voluntarily completed and mailed to the investigator. Two follow-up letters helped to increase subject participation. Of the 509 subjects, 483 (95%) were willing to give the last four digits of their social security number so that subsequent lateness and other behavioral data could be collected. Eighteen months after the survey (April 1992), record-based data (i.e., lateness, absence, turnover, and leaving work early) were collected. Of these 483 subjects, 102 had no recorded lateness incidents over the 18-month period.

A demographic breakdown of the 381 subjects with lateness incidents indicated that: the average age was 34 years; 71% were women; 55% were married; 47% were Black, 39% were White, and 14% were either Hispanic or Asian; 70% had at least a high school degree; 64% worked on the day shift; average organizational tenure was about 11 years; and 42% had one or more children living at home. A comparison of these demographics to the 102 subjects with no lateness incidents revealed that significantly less "never late" participants (28%) had children living at home.

Bank Sample and Procedure

A questionnaire was constructed and administered in September 1990 on a voluntary basis to 844 nonexempt bank employees for whom daily attendance records were kept. This nonunionized bank is headquartered in a large Eastern city. Sample respondents' jobs included teller, data entry clerk, secretary, receptionist, mail clerk, check processor, and maintenance worker. Bank management was concerned about employee lateness and supported the study. Subjects were given time at work to fill out the survey. Supervisory personnel assisted with the survey administration at each work site (e.g., branch or department). All 66 branches participated in this study. Complete confidentiality of subject responses was maintained, and participants mailed their survey directly to the investigator in a preaddressed business reply envelope.

Of the 844 surveys distributed, 720 (85%) were voluntarily completed and mailed to the investigator. Two follow-up letters helped to increase subject participation. Of the 720 subjects, 619 (86%) were willing to give the last four digits of their social security number so that subsequent lateness and other behavioral data could be collected. Eighteen months after the survey (March 1992), record-based data (i.e., lateness, absence, turnover, and leaving work early) were collected. Of these 619 subjects, 171 had no recorded lateness incidents over the 18-month period.

A demographic breakdown of the 448 subjects with lateness incidents indicated that: the average age was 37 years; 63% were women; 61% were married; 58% were White, 25% were Black, and 17% were either Hispanic or Asian; 81% had at least a high school degree; average organizational tenure was about 9 years; and 40% had one or more children living at home. A comparison of these demographics to the 171 subjects with no lateness incidents indicated that the "never late" sample had significantly higher organizational tenure (12 years) and less children (25%) living at home. Following the same survey and record-based data collection procedures across the hospital and bank samples will allow for stronger comparison.

Measures

Lateness. As noted in the Introduction, it is necessary to measure the pattern, frequency, and duration of an employee's lateness behavior. Each of these three components must first be operationalized. The same decision rules in categorizing lateness incidents were used across both samples to test the generalizability of this measurement approach. Human resource personnel in the hospital and bank helped to develop these decision rules. Each organization had an escalating disciplinary policy for dealing with employee lateness. This disciplinary policy was based on a 1-year calendar-based time frame.

Assuming that an employee was not suspended after 1 year, his or her lateness slate was supposedly "wiped clean" and he or she started over. If an employee was suspended, he or she was placed on a probation schedule for the following year. Both the hospital and bank human resource personnel were also concerned about the lack of supervisor diligence in recording the frequency and duration of employee lateness incidents. Part of the reason for both organizations approving this study was to increase supervisors' awareness about employee lateness, including the application of organizational policy for dealing with lateness. Rosse and Hulin (1985) found a similar negligent supervisory attitude in recording employee lateness incidents and applying company policy.

To help overcome this lack of diligence in recording lateness and to allow a stronger application of the pattern, frequency, and duration decision rules for determining the type of lateness behavior an employee exhibited, bank and hospital personnel agreed that a longer (i.e., 18 month) time frame should be used. For example, after 12 months when employee records were wiped clean, both organizations wanted to know if (and by how much) employee lateness behavior increased. Analysis of 12-month versus 18-month lateness behavior for 100 randomly selected participants across both organizations indicated a significant increase in overall lateness behavior. This suggests that some employees may "work the system."

For the hospital, lateness was defined as when an employee reported to work at least 8 min past the beginning of his or her shift. Over a 1year period, a certain number of lateness incidents led to the following penalties: 3 incidents—general counseling; 5 incidents—verbal warning with documentation; 9 incidents—written warning; 13 incidents—3 working days' pay suspension; 15 incidents—5 working days' pay suspension; and 16 incidents—job termination. The hospital's policy also stated that employees would be docked wages in 15-min increments beginning 8 min after start time as follows: 8 to 15 min late—15 min docked; 16 to 30 min late—30 min docked; 31 to 45 min late—45 min docked, and so on.

For the bank, lateness was defined as when an individual reported to work at least 5 min past the beginning of his or her shift. The bank used the following incident to penalty schedule over a 12-month period: 4 incidents—general counseling; 6 incidents—verbal warning with documentation; 8 incidents—written warning; 11 incidents—5 working days' pay suspension; and 14 incidents—job termination. The bank's policy also stated that employees would be docked wages in 30-min increments as follows: 5 to 30 min late—30 min docked; 31 to 60 min late—60 min docked, and so on. Thus the bank's lateness policy was more punitive.

Employees were initially classified as having either a nonrandom or a random lateness pattern. Nonrandom was defined as when at least two thirds (>66%) of an individual's lateness incidents occurred at the beginning of a work week (usually Monday) or after a legal holiday. Random was defined as when less than one third (<33%) of an individual's lateness incidents occurred at the beginning of a work week (usually Monday) or after a legal holiday. Supervisors generally indicated that lateness was most often a problem at the beginning of a work week or just after a legal holiday. Of the 30 supervisors interviewed across both organizations, no one mentioned employees having a midweek or endof-the-week lateness problem. An analysis of 100 randomly selected subjects across both organizations did not support a midweek or other nonrandom lateness pattern. Once an individual was placed in the nonrandom category, frequency and duration were operationalized. Frequency was either increasing or stable, and duration was either increasing or stable.

Increasing frequency was defined as when the number of lateness incidents per month increased across at least 7 of the 18 months. Stable frequency was defined as when the number of lateness incidents per month increased 3 or less of the 18 months. These frequency and duration cutoffs were derived from conversations with the 30 interviewed supervisors mentioned above and human resource personnel. Hospital and bank human resource personnel indicated that typically after an employee was disciplined for excessive lateness, his or her behavior would at least temporarily improve. However, with some employees this improvement began only with stronger sanctions and even then such improvement was transitory (i.e., 1 or 2 months) before the employee would regress back until the next penalty was implemented. Paralleling the frequency cutoffs, increasing duration was defined as when the number of minutes late per month increased across at least 7 of the 18 months. Stable duration was defined as when the number of minutes late per month increased 3 or less of the 18 months.

Increasing and stable were defined on a month-by-month basis by comparing frequency and duration to the previous month. For example, if a participant exhibited the following 18-month frequency of lateness incidents per month: (1) 1, (2) 2, (3) 0, (4) 1, (5) 2, (6) 1, (7) 0, (8) 1, (9) 2, (10) 0, (11) 2, (12) 2, (13) 0, (14) 0, (15) 1, (16) 2, (17) 0, (18) 0, he or she would fall into the increasing frequency category because lateness incidents increased eight times (i.e., 1 to 2, 3 to 4, 4 to 5, 7 to 8, 8 to 9, 10 to 11, 14 to 15, and 15 to 16).

As noted in the above coding scheme, the middle one third was deliberately left out in measuring random (<33%) versus nonrandom (>66%) pattern, increasing (at least 7 out of 18 months) versus stable (3

or less out of 18 months) frequency and increasing (at least 7 out of 18 months) versus stable (3 or less out of 18 months) duration. This was designed to have more confidence that individuals falling into the top versus bottom third of each measure truly exhibited the measured characteristic. Personality research has used a similar approach (i.e., using top-third versus bottom-third subjects on a personality measure) to represent "truer" personality distinctions (Blass, 1977).

This approach also acknowledges the dynamic nature of lateness for individuals (i.e., that employees can display more than one category of lateness in a given period). The middle-third group of subjects on pattern, frequency, and duration should best represent employees with varying types of lateness. This dynamic lateness category group is defined by one third to two thirds of the lateness incidents occurring at the beginning of a work week or after a legal holiday and where frequency and duration increased 4 to 6 of the 18 months. This dynamic lateness group will be compared to the three previously defined lateness category groups: increasing chronic, stable periodic, and unavoidable. Because the dynamic lateness category represents a mix of the other three lateness behaviors (increasing chronic, stable periodic, and unavoidable), it is not possible to a priori hypothesize relationships of dynamic lateness to other work behaviors or antecedents. Therefore dynamic lateness was not included in Table 1.

Using these decision rules, five raters coded the lateness behaviors of the study participants in each sample. For the hospital sample, 353 out of 381 (93%) subjects clearly fell into one of the four categories as follows: increasing chronic lateness (n = 59); stable periodic lateness (n = 70); unavoidable lateness (n = 104); and dynamic lateness (n = 120). The remaining 28 subjects met only one of the frequency or duration cutoffs and were excluded from further analysis. For the bank sample, 402 out of 448 (90%) subjects clearly fell into one of the four categories as follows: increasing chronic lateness (n = 66); stable periodic work lateness (n = 79); unavoidable lateness (n = 125); and dynamic lateness (n = 132). The remaining 46 subjects met only one of the frequency or duration cutoffs and were excluded from further analysis.

To check rater reliability, all five raters coded a common group of 50 randomly selected participants into the four lateness categories. Interrater reliability was assessed using coefficient kappa, which estimates the agreement between pairs of raters while correcting for chance agreement (Cohen, 1960). With five raters there are 10 between-rater comparisons. The average kappa coefficient for these comparisons was .87, and the range was .97 to .81. Given the four types of lateness, three dummy coded variables were created for later canonical analysis.

Voluntary absenteeism. From hospital and bank records, frequency counts for the number of voluntary (unexcused) absences for subjects over the same 18-month period (after the survey) as the lateness data were recorded. Unexcused absence was commonly defined across the hospital and bank as absence without permission. All other behavioral data listed below (i.e., turnover and leaving work early) were collected for the same 18-month period (after the survey) as the lateness incidents. Collecting low base-rate behaviors such as absence and leaving early over a longer period of time can reduce data-distribution problems (e.g., skewness and kurtosis), but at a cost of attenuating the relationships between antecedents and such behaviors (Harrison & Hulin, 1989). However, because the main purpose of this study was to explore the lateness behavior construct, with other withdrawal behaviors being secondary, such a tradeoff was felt to be acceptable.

Turnover. From hospital and bank records, frequency counts for the number of subjects who voluntarily left their organization after 18 months were recorded (1 = stay and 2 = leave). For the hospital, there were 247 (70%) stayers and 106 (30%) leavers. Of these 106 leavers, exit interviews indicated that 23 said that they left for "unavoidable" (Abelson, 1987) non-job-related reasons (e.g., family related or medical). For the bank, there were 288 (72%) stayers and 114 (28%) leavers. Of these 114 leavers, exit interviews revealed 29 "unavoidable" leavers. On the basis of Abelson's (1987) research, these unavoidable leavers were deleted from each sample when analyzing the turnover data.

Leaving work early. Because daily attendance records were kept for nonexempt employees at the bank and hospital, the number of times a subject left work early without permission was tabulated.

Nonwork lateness. In the survey, subjects were asked to retrospectively indicate the number of times they were late over the last 18 months in each of the following nonwork categories: (a) religious (e.g., mass or wedding); (b) volunteer related (e.g., PTA or charity work); (c) familysocial (e.g., picnic or party); and (d) community related (e.g., town meeting, athletic event, garden club, or political event). The following response scale was used: 1 = never (0 times); 2 = rarely (1 or 2 times); 3 = occasionally (3 to 5 times); 4 = frequently (6 to 9 times); and 5 =very frequently (at least 10 times). A frequency range is given within each verbal anchor under the assumption that subjects are more likely to correctly recall an approximate (vs. exact) number of times they were late to an event category. Across both samples 40 spouses were willing to answer (after getting subject permission) this three-item nonwork lateness measure about their participating spouse. The resulting correlation of .69 between subjects and spouses suggests that the participants' retrospective nonwork lateness self-reports are reliable.

Work attitudes. Job satisfaction was measured using the 20-item short-form version of the Minnesota Satisfaction Questionnaire (Weiss, Dawis, England, & Lofquist, 1967). Job involvement was measured with 9 items from Kanungo's 10-item scale. Blau (1985a) recommended that 1 item from Kanungo's (1982) measure be dropped because of its poor factor loading. Organizational commitment was measured using Meyer and Allen's (1984) 8-item affective scale. Recent empirical work (e.g., Dunham & Grube, 1990) suggests that Meyer and Allen's (1984) affective scale is superior to the more popular Porter, Crampon, and Smith (1976) scale. A 6-point response scale (1 = strongly disagree, 6 = strongly agree) was used for these attitude measures.

Leisure-income tradeoff. On the basis of the work of Leigh and Lust (1988) and Youngblood (1984), a 3-item measure of leisureincome tradeoff was used. The items were: "my personal time is more important than the money I lose by being late for work," "I am willing to trade-off my pay for coming to work when I want to," and "given my salary, I can afford to lose money by coming to work when I wish." A 6-point response scale was used (1 = strongly disagree, 6 = strongly agree).

Work-family conflict. Work-family conflict was measured with Kopelman, Greenhaus, and Connolly's (1983) 8-item measure. A sample item is: "my work schedule often conflicts with my family life." A 6-point response scale was used ($1 = strongly \ disagree, 6 = strongly \ agree$).

Transportation concerns. On the basis of the prior work of Farrell and Robb (1980) and Gupta and Jenkins (1983), a 3-item measure was developed. The three items are: (1) "How many miles do you travel to get to work?", (2) "How many minutes does it generally take you to get from home to work?", and (3) "Considering such things as traffic, weather, and availability of public transportation, rate the difficulty of getting to work." The response scales for each item were as follows: (1) 1 = 0-6 miles, 2 = 7-12 miles, 3 = 13-18 miles, 4 = 19-24 miles, 5 = 25-29 miles, and 6 = more than 30 miles; (2) 1 = 0-15 minutes, 2 = 16-25 minutes, 3 = 26-35 minutes; 4 = 36-45 minutes, 5 = 46-60 minutes, and 6 = more than 60 minutes; (3) 1 = very easy, 2 = easy, 3 = slightly easy, 4 = slightly difficult, 5 = difficult, and 6 = very difficult.

Bad weather. Weather was measured by dummy coding the winter or "bad weather" months (November through mid-March) versus the other months on the basis of Motley's (1926) study. Two cycles of badweather months (1990–1991 and 1991–1992) were collected over the 18-month time frame. Mean levels of unavoidable lateness were compared for the bad-weather versus other months.

Personal illness-accidents. A 3-item retrospective scale was developed for the survey. The items were: "Over the last 18 months, how many times have you been involved in some type of traffic accident on the way to work?"; "Over the last 18 months, how many times did feeling ill (e.g., cold, headache, stomach upset, or allergy) delay your arrival to work?"; and "Over the last 18 months, how many times did some kind of unusual event (e.g., flat tire or slow alarm clock) delay your arrival to work?" The following response scale was used: 1 = never (0times); 2 = rarely (1 or 2 times); 3 = occasionally (3 to 5 times); 4 =frequently (6 to 9 times); and <math>5 = very frequently (at least 10 times). The answers to this scale by the same 40 spouses mentioned earlier had a correlation of .38 to their participating spouses' answers. Thus, the retrospective nature of this scale is more problematic.

Results

Canonical analysis was initially done to examine the overall relationship of the dummy-coded lateness behavior categories to the antecedents. Table 2 presents the correlations of study variables with canonical variates broken down by sample. With the Bartlett residual test (Barcikowski & Stevens, 1975), three significant canonical correlations (R)-representing uncorrelated antecedent variable-lateness behavior composites-were found for each sample. The pattern of canonical variate-variable correlations indicates that lower job satisfaction, job involvement, and organizational commitment lead to increasing chronic lateness; higher leisure-income tradeoff and work-family conflict are related to more stable periodic lateness; and transportation concerns, and to a lesser extent personal illness or accidents, lead to unavoidable lateness. Overall, these results support the proposed lateness taxonomy. Given the N to K (subjects to variables) ratio for both samples, these canonical correlations should be stable (Barcikowski & Stevens, 1975).

Means, standard deviations, reliabilities, and correlations among study variables are shown for the hospital sample and the bank sample (see Table 3). As noted earlier, 353 of the 381 hospital employees and 402 of the 448 bank employees could be coded into one of the four lateness categories. The lower variable means on the work attitudes for the bank sample suggest that these employees are somewhat less committed to their work than the hospital employees. The self-report scales, in general, exhibit at least adequate (>.70) coefficient alphas (Nunnally, 1978), with the exception of the personal illness or accident scale. The items making up this scale were heterogeneous. The correlations between study variables are similar across the two samples.

Significant correlations were found between antecedents to different categories of lateness. For example, job attitudes had significant negative relationships to leisure-income tradeoff and work-family conflict. However, the maximum overlap between these variables was 6% or $r = (-.25)^2$. Such results are consistent with prior research (e.g., Thompson & Blau, 1993; Youngblood, 1984).

As noted in the Method section, subjects were classified into one of the four lateness categories. Because the proposed taxonomy of lateness uses both frequency and duration information, overall lateness scores were calculated within each category by adding the sum of incident frequency by duration for each participant. This created overall "minutes late" measures in Table 3. Separate correlations between lateness frequency and duration measures were strong enough (average correlation was .80 across lateness categories and samples) to support combining the frequency and duration data. Adler and Golan (1981) also found very strong relationships between lateness frequency and duration measures. Overall lateness measures will enhance the

Completing and color		Hospital sample		Bank sample		
variate pairs	First	Second	Third	First	Second	Third
Antecedent variables						
Job satisfaction	51	21	14	53	17	05
Job involvement	46	13	11	44	20	11
Organizational commitment	43	18	15	45	22	09
Leisure-income tradeoff	.18	.34	.08	.10	.40	.16
Work-family conflict	.20	.37	.19	.12	.38	.21
Transportation concerns	.11	.15	.39	.17	.13	.32
Bad weather	04	.08	.22	.06	01	.23
Personal illness/accident	.09	.10	.27	.05	.04	.35
Lateness behaviors						
Increasing chronic	.45	.26	.15	.49	.23	.19
Stable periodic	.24	.40	.21	.27	.52	.17
Unavoidable	.08	.13	.47	.11	.18	.50
R	$R_1 = .43^{**}$	$R_2 = .35^*$	$R_3 = .30*$	$R_1 = .48^{**}$	$R_2 = .38*$	$R_3 = .32^*$

Table 2				
Correlations of Study Variable	s With Canonical	Variates Brok	ken Down By San	nnle

Note. Canonical variate-variable correlations >.30 are in **boldface** type. * p < .05. ** p < .01.

comparability of this study's results to previous lateness research (e.g., Adler & Golan, 1981; Gupta & Jenkins, 1983).

Tests of Hypotheses

Hypothesis 1 (increasing chronic lateness will have a stronger positive relationship to voluntary absence, voluntary turnover, and leaving work early than stable periodic lateness) was supported across both samples for voluntary absence and leaving early but not for turnover. As shown in Table 3, significant differences in correlations (McNemar, 1969) were found (p < .05, one-tailed) for these relationships.

Hypothesis 2 (a significant positive relationship will be found between unavoidable lateness and nonwork lateness across both samples) was supported. Hypothesis 3 (significant negative relationships will be found between job satisfaction, job involvement, and organizational commitment to increasing chronic lateness across both samples) was supported. Hypothesis 4 (significant positive relationships will be found between leisureincome tradeoff and work-family conflict to stable periodic

Table 3

Means, Standard Deviations, Reliabilities, and Correlations Among Study Variables for Bank and Hospital Samples

		Ho	Hospital sample		Bank sample					
Variable		М	SD	α	М	SD	α	1	2	3
1. J	ob satisfaction	75.6	12.4	.86	73.8	11.9	.87	_	.41*	.36*
2. 0	Organizational commitment	30.9	7.2	.85	28.7	6.8	.88	.39*		.39*
3. J	ob involvement	35.1	7.5	.84	33.6	7.7	.77	.38*	.41*	
4. 1	eisure-income tradeoff	12.2	3.1	.73	10.8	3.3	.75	20*	24*	16*
5. V	Vork-family conflict	24.3	4.6	.81	25.7	4.9	.80	25*	17*	19*
6.1	ransportation concerns	9.6	2.4	.70	8.3	2.1	.69	07	03	.02
7. F	ersonal illness or accident	9.1	2.2	.61	8.2	2.0	.65	.04	.01	04
8 1	ncrease chronic lateness ^a	255.3b	68.5	NA	231.8°	64.2	NA	39*	41*	38*
9.5	table periodic lateness*	217.4 ^b	71.7	NA	212.1°	63.4	NA	15	17	19
10 I	Inavoidable lateness ^a	218.6 ^b	73.3	NA	217.3°	67.1	NA	11	12	10
11 T	Dynamic lateness ^a	230.4 ^b	85.8	NA	222.5°	88.3	NA	19*	22*	18*
12. 1	oluntary absence	8.3	3.2	NA	7.1	2.5	NA	24*	20*	17*
13. 1	urnover	1.3 ^b	0.6	NA	1.3°	0.6	NA	22*	23*	14*
14. 1	eaving early	13.5	4.6	NA	12.1	3.8	NA	25*	21*	16*
15. N	Nonwork lateness	12.1	4.3	.75	11.6	4.2	.72	06	05	.02

Note. Correlations for the hospital sample are below the diagonal, and correlations for the bank sample are above the diagonal.

* Reported in minutes based on Σ (Frequency * Duration).

 $^{b}N = 59$ for increase chronic lateness, N = 70 for stable periodic lateness, N = 104 for unavoidable lateness, N = 120 for dynamic lateness, N = 330

° N = 66 for increase chronic lateness, N = 79 for stable periodic lateness, N = 125 for unavoidable lateness, N = 132 for dynamic lateness, N = 373

^d NA = not applicable because there were separate groups of subjects within each lateness category.

* Significant difference in correlations, p < .05, one-tailed test.

* p < .05.

lateness for both samples) was supported. Hypothesis 5 (a significant positive relationship between transportation concerns and unavoidable lateness will be found) was supported for both samples. Personal accident or illness was positively related to unavoidable lateness for the bank sample but not the hospital sample. Correlation results with only the first 12 months of lateness data were consistent with the results cited above.

To test the relationship between bad weather and unavoidable lateness, a t test was done between winter months (i.e., November through mid-March) versus the other months to see if unavoidable lateness was higher during the winter months. The results did not support this hypothesis. The mean minutes level of unavoidable lateness during winter months was 219.4 versus 217.7 for the other months (t = 1.18, p > .05) for the hospital sample and 219.1 versus 215.5 (t = 1.47, p > .05) for the bank sample.

Tables 4 and 5 show the mean levels of study variables for both samples, broken down by lateness category. Consistent with prior lateness research, the never late group is also shown. An analysis of variance was used to test for significant overall mean differences on each variable; this was followed by the Duncan multiple range test to examine the differences between pairs of means at the .01 level of significance. The Duncan multiple range test is favored over the least significant difference test (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975) because it uses a different range value for different size subgroups. The results in Tables 4 and 5 provide further support for the study hypotheses. Increasing chronic late subjects exhibited significantly higher voluntary absence and leaving early behavior and had significantly lower job satisfaction, organizational commitment, and job involvement than subjects in the other lateness categories. Stable periodic late subjects had significantly higher leisure-income tradeoff and work-family conflict, whereas unavoidably late subjects had a significantly higher level of nonwork late behavior and transportation concerns (hospital sample only).

Perhaps most interesting is the comparison of mean level variables between the never late versus lateness categories. The results across both samples show that the never late participants had significantly higher job satisfaction, organizational commitment, and job involvement and significantly lower leisureincome tradeoff, work-family conflict, personal illness or accident, voluntary absence, and leaving work early. These patterns of results are supportive of the lateness taxonomy and reinforce the importance of antecedent and work behavior variables for distinguishing late versus never late behavior.

The demographic difference of never late subjects being less likely to have dependent children at home would help to explain some of these results, including the lower levels of work-family conflict, leisure-income tradeoff, and leaving work early. Both samples in this study consisted primarily of women. Using a sample of primarily female employees, Thompson and Blau (1993) found a significant positive relationship between number of dependent children at home and perceived conflict between family and work. Over 20 years ago, Hall (1972) noted that work-family conflict is higher for employed women versus men because women are more likely to deal with work and family roles simultaneously (i.e., juggle work and family demands) rather than sequentially. Duxbury and Higgins (1991) argued that gender differences in antecedents and consequences of work-family conflict were largely attributable to societal expectations and behavioral norms. These authors suggested that a more equal distribution of family roles to match increased responsibilities outside the home was needed.

Discussion

The results of this study empirically demonstrate, across two samples, that three distinct categories of lateness behavior can

4	5	6	7	8	9	10	11	12	13	14	15
18*	14*	05	06	45*	17	08	19*	23*	26*	24*	.03
16*	15*	07	02	38*	18	13	18*	17*	20*	16*	.04
13*	11*	01	05	35*	14	10	20*	15*	17*	19*	.02
	.10*	.08	.01	.14	.32*	.16	.15	.13*	.07	.18*	.09
.14*	_	.12	.09	.10	.31*	.12	.19*	· .11*	.14*	.15*	03
.11*	.09		.14	.07	.13	.27*	.08	.04	03	.11*	.05
.05	.07	.15*	_	.11	.07	.29*	.11	.09	.05	.10*	.12*
.15	.13	.08	.09		NAd	NA ^d	NAd	.42*°	.19	.38*°	.01
.35*	.28*	.12	.07	NAd	_	NAd	NAd	.16°	.13	.14°	.04
.16	.14	.25*	.18	NA ^d	NA ^d		NA ^d	.12	.08	.06	.34*
.17	.20*	.12	.09	NAd	NA ^d	NAd	_	.20*	.17	.16	.13
.19*	.18*	.08	.11*	.39*°	.12°	.10	.20*	_	.31*	.29*	.10*
.10	.11*	.03	02	.20	.14	.04	.10	.30*	_	.15*	.02
.15*	.24*	.13*	.10*	.43*°	.13°	01	.18*	.26*	.10*		11*
.12*	.09	.06	.07	.03	.08	.32*	.15*	.14*	.07	09	_

for turnover, other N = 353. for turnover, other N = 402. Table 4

Variable	$\begin{array}{l} \text{Chronic} \\ (N = 59) \end{array}$	Periodic $(N = 70)$	Unavoidable $(N = 104)$	Dynamic (<i>N</i> = 120)	Never late (<i>N</i> = 102)	F	
Job satisfaction							
M	67.3.	73.9 _b	78.4	76.1.	81.2		
SD	11.9	12.3	12.9	12.4	13.1	5.23**	
Organizational commitment							
М	25.4	30.2 _h	32.3 _b	30.7	35.1	3 0 (t	
SD	6.6	7.2	7.1	7.3	7.4	3.86*	
Job involvement							
М	29.8,	34.3h	35.7 _h	36.2 _b	41.6 _c	4 1 1 1	
SD	7.1	7.2	7.6	7.8	7.5	4.11*	
Leisure-income tradeoff							
М	11.5.	14.8	12.3	11.9,	7.4	2 224	
SD	3.1	3.3	3.0	2.8	3.1	3.22*	
Work-family conflict							
M	22.7.	29.2h	24.1.	23.8	20.1	4 2 3 4 4	
SD	4.8	4.9	4.7	4.4	4.3	4.37**	
Transportation concerns							
M	9.1.	8.9,	11.5 _b	9.4	8.3	2.16*	
SD	2.2	2.3	2.6	2.5	2.4	2.15*	
Personal illness or accident							
M	8.8.	8.7.	9.3.	9.1.	3.9h		
SD	2.3	2.2	2.1	2.2	2.3	4.68**	
Voluntary absence							
M	11.5	8.15	7.9 _b	7.8 _b	5.1 _c	(02**	
SD	3.6	3.0	3.2	3.1	2.0	6.02**	
Turnover							
М	1.7	1.4	1.1	1.2	1.1	1 27	
SD	0.6	0.5	0.4	0.5	0.4	1.37	
Leaving early							
M	18.5	15.9 _b	12.5 _c	12.3 _c	7.3 _d	0.33**	
SD	4.9	4.8	4.4	4.5	3.1	9.42**	
Nonwork late							
M	10.3	11.6,	13.9 _b	12.0 _a	9.5 _a	2 52±	
SD	4.5	4.2	4.4	4.3	2.7	3.33*	

Means and Standard Deviations of Study Variables by Lateness Category for Hospital Sample

Note. Across each row, cell means that do not share the same subscript are significantly different at the .01 level by Duncan's multiple range test. * p < .05. ** p < .01.

be operationalized by pattern, frequency, and duration. By isolating such lateness categories, it was argued earlier that stronger antecedent-lateness relationships could be found than in previous research that did not break down general lateness behavior into specific categories. For example, job involvement accounted for 14% (hospital) and 12% (bank) of increasing chronic lateness behavior versus other studies (e.g., Beehr & Gupta, 1978; Cummings & Manring, 1977) where 1% to 8% of lateness has been accounted for. Organizational commitment accounted for 17% (hospital) and 14% (bank) of increasing chronic lateness behavior versus other studies (e.g., Blau, 1986; Clegg, 1983) where 4% to 7% of lateness has been accounted for. Transportation concerns accounted for approximately 7% of unavoidable lateness behavior in both samples versus 2% to 5% of lateness in other studies (e.g., Farrell & Robb, 1980; Gupta & Jenkins, 1983; Leigh & Lust, 1988).

Furthermore, although the antecedents used were generally related to specific lateness behavior categories as hypothesized, such antecedents were generally not significantly related to other categories of lateness. This lack of statistically significant relationships when crossing antecedents to other lateness categories provides additional support for the suggested lateness behavior taxonomy. Also, a dynamic lateness behavior category was created that represented subjects with a mixture of increasing chronic, stable periodic, and unavoidable lateness. The correlational results found between antecedent variables and work behaviors to dynamic lateness are quite similar in magnitude to the results found by previous research (e.g., Blau, 1986; Clegg, 1983; Cummings & Manring, 1977; Gupta & Jenkins, 1983). This suggests that previous lateness studies may have measured lateness with some combination of different types of lateness behaviors.

Various limitations of this study need to be noted. The use of retrospective nonwork late and personal illness or accident measures, especially over a long time period, is problematic. For example, there is a longer time frame (i.e., 3 years) between the retrospective nonwork lateness and personal illness measures to the behavioral data versus the 18-month time frame between the attitudinal and perceptual measures to the behavioral data. Having a greater time frame between variables would be expected to weaken their relationships (e.g., Mobley et al., 1979). Also, asking subjects to remember if their arrival to work was delayed by an unusual event over a retrospective 18-month time frame could pick up antecedents (e.g., work-family conflict), which may spill over into different lateness categories. Impression management (Paulhus, 1986), or trying to look good to

Table 5			
Means and Standard Deviations of Study	Variables by Lateness	Category for Bank	Sample

Variable	$\begin{array}{c} \text{Chronic} \\ (N = 66) \end{array}$	Periodic $(N = 79)$	Unavoidable $(N = 125)$	Dynamic (<i>N</i> = 132)	Never late $(N = 171)$	F
Job satisfaction						
М	67.1.	72.9 _b	74.1 _b	74.3 _b	80.3 _c	4.77**
SD	12.0	12.1	11.8	11.9	10.8	
Organizational commitment						
м	25.9 _a	29.2 _b	30.6 _b	28.4 _b	34.0 _c	4.06**
SD	6.5	6.7	7.0	6.9	7.1	
Job involvement						
М	30.3 _a	33.1 _b	34.5 _b	33.9 _b	37.7 _c	4.50**
SD	7.9	7.8	7.7	7.5	8.0	
Leisure-income tradeoff						
М	9.8 _a	12.6 _b	9.9,	10.6,	6.7 _c	5.51**
SD	3.6	3.5	3.2	3.3	2.6	
Work-family conflict						
M	25.7,	28.3 _b	24.2 _c	24.5 _c	20.2	5.13**
SD	5.0	5.1	4.6	4.8	4.4	
Transportation concern						
M [·]	8.0 _a	7.8,	9.2,	8.1 _a	6.8 _b	2.29*
SD	2.2	2.1	2.2	2.0	1.9	
Personal illness or accident						
М	8.1 _a	7.3,	8.2,	8.4	3.8	4.46*
SD	2.0	1.9	2.1	1.9	1.4	
Voluntary absence						
M	9.5 _a	7.0 _b	6.6 _h	6.7 _b	4.9	6.35**
SD	2.7	2.6	2.4	2.5	1.8	
Turnover						
М	1.6	1.3	1.1	1.2	1.1	1.09
SD	0.6	0.5	0.4	0.5	0.4	
Leaving early						
M	15.5 _a	12.3 _h	11.2 _b	11.5 _b	6.9.	8.97**
SD	4.0	3.9	3.7	3.8	2.6	
Nonwork late			- • ·			
М	10.5 _a	11.4,	13.7 _b	10.9	9.8.	3.39*
SD	4.1	4.2	4.3	4.2	3.7	0.000

Note. Across each row, cell means that do not share the same subscript are significantly different at the .01 level by Duncan's multiple range test. * p < .05. ** p < .01.

others, could further distort subject responses (e.g., more likely to report feeling ill than having a slow alarm clock).

Future researchers could consider collecting such self-report data over shorter time periods or having subjects use a diary or log to help them more accurately remember incidents. Similarly, finding the self-report measure of transportation concerns, but not the objective bad weather measure, to be significantly related to unavoidable lateness reinforces the need to take precautions against retrospective justification bias affecting results. Certainly other methodological concerns (e.g., range restriction or lower measure reliability) may also affect the amount of lateness category variance explained.

It is also important to acknowledge that, despite the inductive support within both organizations studied for developing random versus nonrandom patterns and stable versus increasing frequency and duration classifications, the decision rules and cutoff values applied were organizational specific. In other organizations, the decision rules and cutoff values to create such lateness behavior categories may well be different. However, the key issue seems to be that some type of decision rule–cutoff value scheme consistently applied to frequency and duration lateness data can result in identifying meaningful and useful categories of employee lateness behavior.

Future research might well expand the number of antecedents used in the proposed lateness taxonomy. For example, time management skills or procrastination (Burka & Yuen, 1983) may be a useful individual difference variable to measure, particularly for subjects in the unavoidable lateness category. By "cutting things too close" in planning to be on-time for work. an individual is more susceptible to any type of less controllable antecedent (e.g., traffic or weather) causing lateness. Richard and Slane (1990) found that punctuality style was a persistent personality characteristic across work and nonwork situations. Self-efficacy may be another individual difference worthy of future investigation. Frayne and Latham (1987) found that increasing employee-perceived self-efficacy through training led to better subsequent job attendance. Employees with low selfefficacy are more likely to perceive that they cannot cope with environmental demands. Such environmental demands could include not only bad weather and transportation problems but also work-family conflict situations.

What are the implications of this study's results for organizations? The positive links of increasing chronic lateness to voluntary absence and leaving work early with low job involvement, job satisfaction, and organizational commitment as antecedents supports a progressive withdrawal pattern from work (Herzberg et al., 1957; Rosse, 1988). For example, with conditional probability analysis, Rosse (1988) found support for a lateness-to-absence progression. It is important for supervisors to monitor and recognize changes in the pattern, frequency, and duration of their employees' lateness and to prevent this progression. By talking to the employee and understanding the cause of his or her work-related unhappiness, a supervisor may be able to take remedial steps (e.g., job rotation, lateral transfer, or active counseling; Kennedy, 1984). The stable periodic lateness pattern may be more difficult to break. A flextime schedule (Nollen & Martin, 1978), if feasible, may help an employee deal with a work-family conflict or leisure-income tradeoff concern.

Even for employees falling into the unavoidable lateness category, managers should investigate if the pattern, frequency, and duration of incidents is truly random. For example, is the employee always late for the same reason (e.g., heavy traffic or bad weather)? Are there other employees with approximately the same commute (e.g., distance or same route) who show similar lateness behavior? Discussing the employee's commute and encouraging him or her to do more advance planning, including steps to allow more time to get into work, may be helpful.

Stricter enforcement of the company's lateness disciplinary policy by supervisors (Rosse & Hulin, 1985), as well as further toughening of this policy, may also be necessary. This is particularly true for employees who "work the system." In a study of absences among 60 blue-collar employees, Morgan and Herman (1976) found that for some subjects absenteeism provided an opportunity to experience consequences encouraging absence that were not offset by organizational consequences for deterring absence. Besides a stronger "stick," having a "carrot" to encourage employees to be prompt everyday may be useful. Hermann, deMontes, Dominquez, Montes, and Hopkins (1973) found that daily small cash bonuses for promptness over a 49-week treatment period led to a strong reduction in tardiness of six frequently late hourly employees.

What are some research implications of this study? As noted in the Introduction, recent research by Hanisch and Hulin (1990, 1991) has suggested that specific withdrawal behaviors such as lateness and absenteeism can be aggregated into a more general work withdrawal construct. This study's position is that the creation of such a construct may be premature. Hanisch and Hulin (1990, 1991) found in both studies, using academic and nonacademic subjects from a large Midwestern university, that lateness, absence, and unfavorable job behaviors (i.e., making excuses to get out of work) loaded strongly onto a general factor which they labeled work withdrawal. Hanisch and Hulin (1991) defined work withdrawal as "behaviors dissatisfied individuals use to avoid aspects of their specific work role or minimize time spent on their specific work tasks while maintaining their current organization and work-role memberships" (p. 111). However, in neither study did Hanisch and Hulin (1990, 1991) discuss what the university's disciplinary policy was for dealing with lateness, absence, or undesirable behaviors. Most organizations, including the bank and hospital used here, have escalating disciplinary policies that culminate in terminating the employee. The impact of such disciplinary policies on a general work withdrawal construct needs to be addressed.

In addition, the self-report methodology used by Hanisch and Hulin (1990, 1991) to collect the lateness, absence, and undesirable job behaviors suggests that method variance may be contributing to the positive relationships between these behaviors (Schwab, 1980). Relying on supervisor or interviewer ratings to examine relationships between lateness, absence, and other withdrawal behaviors (e.g., Beehr & Gupta, 1978; Gupta & Jenkins, 1983; Rosse, 1988; Rosse & Hulin, 1985) can lead to problems, such as measurement error because of uneven recording of behaviors (Rosse & Hulin, 1985) or attribution errors (Payne & Nicholson, 1987). The rating-based absence and leaving work early measures collected in this study suffer from these limitations.

Furthermore, in studies testing the links between withdrawal behaviors, general or overall measures of these behaviors were most often used (e.g., Gupta & Jenkins, 1983; Hanisch & Hulin, 1990, 1991; Rosse, 1988; Rosse & Hulin, 1985). Such general measures may hide or mask relationships between more conceptually similar specific types of withdrawal behaviors. For example, the relationships between unavoidable lateness and unavoidable absence or increasing chronic lateness and avoidable absence may be stronger than the link between general lateness and general absence. Unfortunately, testing more specific relationships between withdrawal behaviors was beyond the scope of this study, because only limited measures of other withdrawal behaviors were gathered.

However, in future research a broader taxonomy of withdrawal behaviors—including lateness, absence, and leaving early—could be developed and tested with inductively defined thresholds to determine pattern, frequency, and duration categories for all of the measured withdrawal behaviors. Ideally, the same threshold values would be applicable across all the withdrawal behaviors, but the investigator should be prepared to develop different cutoff values for each withdrawal behavior. Such different behavioral thresholds would reflect the organization's sensitivity to each withdrawal behavior. For example, with a sample of nurses Blau (1985b) found that a hospital's control policy for lateness was not as strict as it was for unexcused absence.

To conclude, despite the inductive approach used to test the proposed taxonomy of lateness categories, the results seem promising. Certainly, additional work-operationalizing lateness-behavior categories with other samples is needed. The dominance of blue-collar and shift-based jobs in lateness research may be at least partially due to lateness incidents being more carefully monitored for such jobs. It would be interesting to see the extent to which this taxonomy was supported with managerial or other jobs traditionally given more flexibility regarding lateness. Finally, this study suggests that investigators must be more sensitive to how lateness is operationalized. More careful operationalization can result in a greater understanding of the lateness construct.

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